IN THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) An apparatus for examining a surface, comprising:

a polarization analyser element placed in ~~the~~ a path of a light beam reflected by the surface, the polarization analyser element constructed and arranged to alternately transmit a crossed polarization state and a parallel polarization state;

a digital image acquisition device disposed in the path of the beam reflected by the surface downstream of the polarization analyser element; and

a processing unit ~~capable of calculating the~~ configured to calculate a brightness and ~~the~~ an intensity of a plurality of points of the surface from pixels of at least two images of the surface;

wherein the apparatus does not contact the surface.

2. (Currently Amended) An apparatus according to Claim 1, further comprising a source of polarized light ~~capable of emitting~~ configured to emit a beam incident on the surface to be examined.

3. (Previously Presented) An apparatus according to Claim 2, wherein the light emanating from the source is substantially isotropic.

4. (Previously Presented) An apparatus according to Claim 2, wherein the light emanating from the source is substantially white.

5. (Currently Amended) An apparatus according to Claim 2, wherein ~~the~~ a spectrum of the light emanating from the source is substantially the same as ~~the~~ a solar spectrum.

6. (Currently Amended) An apparatus according to Claim 1, wherein the polarization analyser element comprises a ~~means for transmitting~~ first transmitter configured to transmit crossed polarization and a ~~means for transmitting~~ second transmitter configured to transmit parallel polarization, the ~~transmission means~~ first and second transmitters being alternatively active.

7. (Previously Presented) An apparatus according to Claim 6, wherein the polarization analyser element is rotatable.

8. (Currently Amended) An apparatus according to Claim 6, the polarization analyser element further comprises an electrical switching component ~~means~~.

9. (Currently Amended) A process for the non-contact examination of a keratinous surface, comprising:

(i) analysing crossed and parallel polarizations of a light beam reflected by the surface;

(ii) taking digital images of the crossed and parallel polarizations of the reflected beam; and

(iii) calculating ~~the~~ a brightness and ~~the~~ an intensity of a plurality of points of the surface from pixels of at least two images of the surface.

10. (Previously Presented) A process according to Claim 9, wherein the surface is uneven.

11. (Previously Presented) A process according to Claim 9, wherein the digital images are monochromatic digital images.

12. (Previously Presented) A process according to Claim 9, wherein the digital images are polychromatic digital images.

13. – 14. (Cancelled).

15. (Currently Amended) An apparatus for examining a surface comprising:

a source of polarized light constructed and arranged to emit a beam incident on the surface to be examined, ~~the~~ a spectrum of the light being substantially the same as ~~the~~ a solar spectrum;

a polarization analyzer element placed in ~~the~~ a path of a light beam reflected by the surface;

a digital image acquisition device disposed in the path of the beam reflected by the surface downstream of the polarization analyzer element; and

a processing unit ~~capable of calculating the~~ configured to calculate a brightness and ~~the~~ an intensity of a plurality of points of the surface from pixels of at least two images of the surface;

wherein the apparatus does not contact the surface.

16. (Currently Amended) An apparatus for examining a surface comprising:

an optical element selected from the group consisting of an orientable polarisation analyser element and a polarizing splitter cube placed in ~~the~~ a path of a light beam reflected by the surface;

a camera ~~for taking~~ configured to take digital images, the camera being placed in the path of the beam reflected by the surface downstream of the polarization analyser element; and

a processing unit ~~capable of calculating the brightness and~~ configured to calculate ~~the~~ a brightness and ~~the~~ an intensity of a plurality of points of the surface from pixels of at least two images of the surface;

wherein the apparatus does not contact the surface.

17. (Currently Amended) An apparatus according to Claim 15 or 16, further comprising a source of polarized light ~~capable of emitting~~ configured to emit a beam incident on the surface to be examined.

18. (Previously Presented) An apparatus according to Claim 17, wherein the light emanating from the source is substantially isotropic.

19. (Previously Presented) An apparatus according to Claim 15 or 16, wherein the light emanating from the source is substantially white.

20. (Currently Amended) An apparatus according to Claim 15 or 16, wherein ~~the~~ a spectrum of the light emanating from the source is substantially the same as ~~the~~ a solar spectrum.

21. (Currently Amended) An apparatus according to Claim 15 or 16, wherein the analyser comprises ~~a means for transmitting~~ a first transmitter configured to transmit the crossed polarization and ~~a means for transmitting~~ a second transmitter configured to transmit the parallel polarization, the ~~transmission means~~ first and second transmitters being alternatively active.

22. (Currently Amended) An apparatus according to Claim 21, wherein the analyser is rotatable ~~rotating~~.

23. (Currently Amended) An apparatus according to Claim 21, wherein the analyser further comprises an electrical switching component ~~means~~.

24. (Previously Presented) The process of Claim 9, wherein the process is performed by a computer.

25. (Previously Presented) A computer-readable medium bearing a program code embodied thereon for performing the process of Claim 9.

26. (Currently Amended) An apparatus for examining a surface, comprising:

a polarization analyser element placed in ~~the~~ a path of a light beam reflected by the surface, the polarization analyser element constructed and arranged to alternately transmit a crossed polarization state and a parallel polarization state;

a digital image acquisition device disposed in the path of the beam reflected by the surface downstream of the polarization analyser element; and

a processing unit configured and arranged to calculate a brightness and color information for a plurality of points of the surface from pixels of at least two images of the surface;

wherein the apparatus does not contact the surface.